

COVID-19 Race/Ethnicity Data Analysis January – October 28, 2020

Snohomish County COVID-19 Data Analysis by Race/Ethnicity: January 19, 2020 through October 28, 2020

The race and ethnicity profile of Snohomish County shows that the county is predominantly white, non-Hispanic (69%) (table 1). Asian's are the second most prevalent race seen in the county (11%) followed closely by all-race Hispanics. Race/ethnicity data comparisons are limited as only 64% of COVID-19 cases have race/ethnicity data available. This results in underestimates of race- and/or ethnicity-specific rate calculations. Furthermore, if racial and ethnic minorities are disproportionately represented among cases for whom such data is missing, their relative risk estimate will be biased downward relative to non-Hispanic whites. Complex attribution methodology exists to adjust for such bias, but it is beyond the scope and capacity of this report.

Non-Whites and Hispanics are disproportionately affected by COVID-19. Most non-White races and Hispanics have a significantly higher risk of COVID-19 infection compared to non-Hispanic Whites (table 1). The highest case rate per 100,000 is seen in the Native Hawaiian/Pacific Islander population with a relative-risk 8 times higher than non-Hispanic Whites. All-race Hispanics were the second highest rate of infection in Snohomish County (RR=4), followed by African American (RR=2), American Indians/Alaska Native (RR=2). These differences are statistically significant ($p < 0.05$). Asians had a lower relative risk than other non-White races and had the same risk as non-Hispanic Whites.

Native Hawaiian/Pacific Islanders were at a much higher rate of needing hospitalization than other races/ethnicities (table 2). Native Hawaiian/Pacific Islanders were 6 times more likely to be hospitalized than non-Hispanic Whites. All race Hispanics, and American Indian/Alaska Natives also had higher rates of hospitalizations compared to Whites. These differences (versus non-Hispanic whites) are all statistically significant. Asians had the lowest rate per 100,000 (51) of hospitalization for COVID-19 illness, but the difference (versus non-Hispanic whites, RR 0.8) is not statistically significant.

COVID-19 related deaths are difficult to compare due to small numbers (table 3) and wide confidence intervals. Currently non-Hispanic Whites are the most impacted race in terms of the *number* of COVID-related deaths. Asians have a slightly lower *rate* of death compared to non-Hispanic Whites, and the difference is statistically significant. Native Hawaiian/Pacific Islanders' death rate shows a statistically significant elevation compared to non-Hispanic Whites (RR=2). American Indian/Alaska Natives have a *non-significant* increase in death rate compared to non-Hispanic whites, whereas African Americans and Hispanics have a *non-significant* decrease in death rate compared to whites. These non-significant findings may be due to chance.

Differences between groups in hospitalization and death rates are likely due to risk of exposure and infection given that 95% confidence intervals for case-hospitalization and case-fatality rates show overlap (Table 4).

Table 1: COVID-19 cases by race and ethnicity (January – October 5, 2020), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	259	24195	1070.5	2.1	1.8	2.3
American Indian/Alaska Native	94	9083	1034.9	2.0	1.6	2.5
Asian	492	92570	531.5	1.0	0.9	1.1
Native Hawaiian or Pacific Islander	193	4562	4230.6	8.2	7.1	9.5
White	2904	563862	515.0	1.0		
Other, not Hispanic	133	---	---	---	---	---
Ethnicity						
Hispanic	1811	88072	2056.3	4.0	3.8	4.2
Total confirmed case with race/ethnicity data	5886	---	---	---	---	---
Total confirmed cases in data set	9108	---	---	---	---	---
% with race or ethnicity data	64.6%	---	---	---	---	---

Data source: Washington Disease Reporting System (WDRS). Population data from Washington State Office of Financial Management. Race/ethnicity population estimates from 2019, total population 2020 estimate.

Figure 1: COVID-19 case rates per 100,000 by Race and Ethnicity, Snohomish County

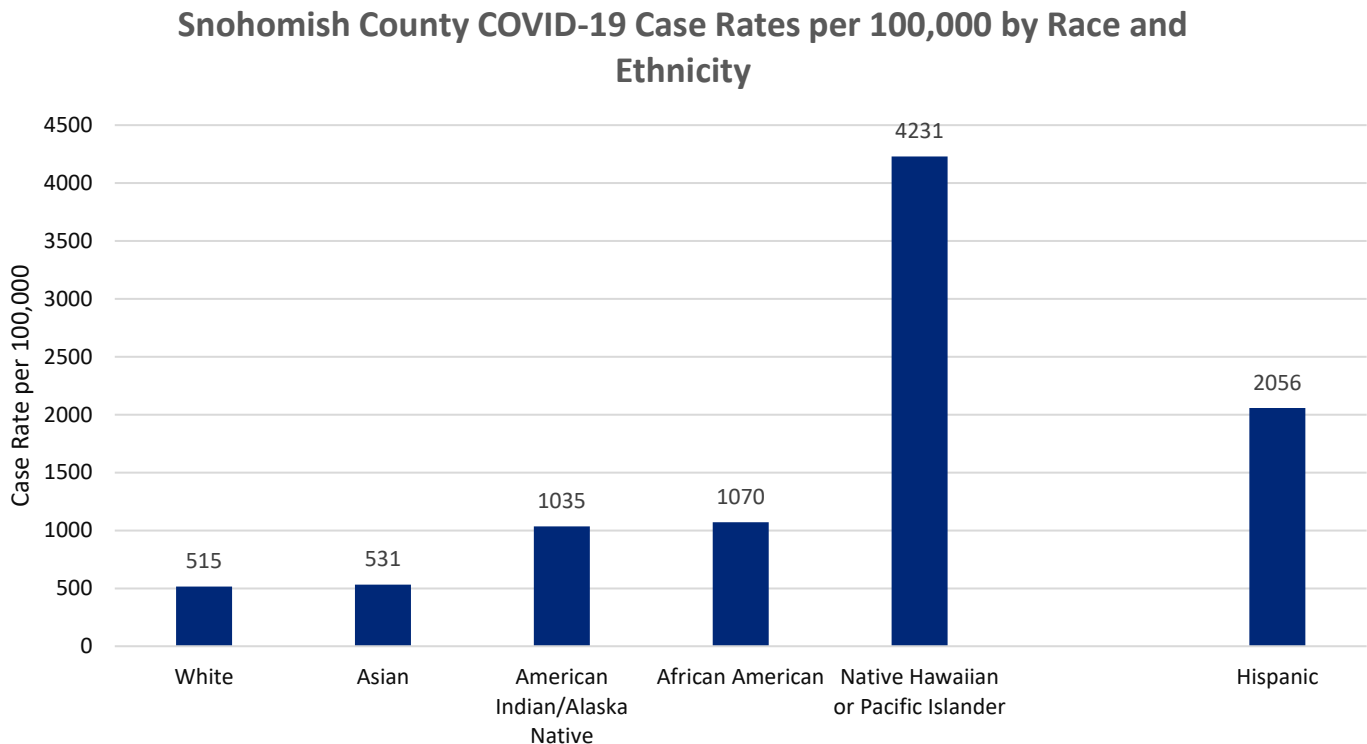


Table 2: COVID-19 hospitalizations by race and ethnicity (January – October 28, 2020), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	CI Upper
African American	19	24195	78.5	1.2	0.8	1.9
American Indian/Alaska Native	12	9083	132.1	2.0	1.2	3.5
Asian	47	92570	50.8	0.8	0.6	1.0
Native Hawaiian or Pacific Islander	17	4562	372.6	5.7	3.6	9.1
White	369	563862	65.4	1		
Other, not Hispanic	43	---	---	---	---	---
Ethnicity						
Hispanic	112	88072	127.2	1.9	1.6	2.3

Table 3: COVID-19 related deaths by race and ethnicity (January – October 28, 2020), Snohomish County

Race non-Hispanic	Case count	Population	Rate per 100,000	Relative Risk	95% CI Lower	95% CI Upper
African American	<5	24195	Not calculated			
American Indian/Alaska Native	6	9083	66.1	2.2	1.0	4.9
Asian	13	92570	14.0	0.5	0.3	0.8
Native Hawaiian or Pacific Islander	6	4562	131.5	4.4	2.0	9.7
White	168	563862	29.8	1.0		
Ethnicity						
Hispanic	15	88072	17.0	0.6	0.3	0.9
Total*	227	830500	27.3			

*Total includes all races plus other and unknown

Table 4. COVID-19 case-hospitalization and case-death proportions (January – October 28, 2020), Snohomish County

Race non-Hispanic	Cases	Hospitalizations		Deaths		
		N	% (95% CI)	N	% of cases (95%CI)	% of hospitalized
African American	259	19	7 (4.2,10.5)	<5	1 (<5 not calculated)	15.8
American Indian/Alaska Native	94	12	13 (6.0,19.5)	6	6 (1.4,11.3)	50.0
Asian	492	47	10 (7.0,12.2)	13	3 (1.2,4.1)	27.7
Native Hawaiian or Pacific Islander	193	17	9 (4.8,12.8)	6	3 (0.7,5.6)	35.3
White	2904	369	13 (11.5,13.9)	168	6 (4.9,6.6)	45.5
Ethnicity						
Hispanic	1811	112	6 (5.1,7.3)	15	1 (0.4,1.2)	13.4